



2026 PRODUCT CATALOG

Celebrating
100 YEARS
of American
Rocketry



TABLE OF CONTENTS

MODEL ROCKET BASICS	4	LASER X2	27
ENGINE BASICS	6	LIL' SPITE	28
STARTER SETS	8	SPACE2INSPIRE	29
LAUNCH SETS	10	SCALE MODELS	30
BEGINNER ROCKETS	12	ESTES WHOLESALE	32
INTERMEDIATE ROCKETS	14	ESTES WHITE LABEL PROGRAM	33
ADVANCED ROCKETS	16	PRO SERIES II ROCKETS	34
EXPERT ROCKETS	18	MASTER ROCKETS	37
GODDARD ROCKET	20	ESTES EDUCATION	38
SOYUZ	21	ACCESSORIES & LAUNCH SUPPLIES	43
ENGINE INFORMATION	22	APPAREL & GIFTS	44
ENGINE PERFORMANCE CHART	24	NAR SAFETY CODE	46
ENGINE THRUST CURVES	26	INDEX & WARRANTY	47

OUR VISION:

To ignite the imagination of every generation by being the most trusted source for model rocketry.

OUR MISSION:

To create safe, successful rocketry experiences for customers everywhere, from their backyards and school yards to worlds beyond.

THE FOUNDATIONS OF ROCKETRY

68 years ago, Vern and Gleda established Estes Rockets. Since then, it has carried a proud tradition of safe, exciting, and reliable launches. The principles they established for motor manufacturing, model rocket design, and safe rocket flight have led model rocketry to an outstanding safety record. Millions remember the moment they first pressed launch and we're proud to keep their legacy flying.



SKILL KEY



BEGINNER

Perfect for the first-time flyer or quick weekend fun. Little to no build experience required. Some kits have snap together, pre-colored parts and easy to apply decals. Some glue may be required. **Build Time: >1 hour**



INTERMEDIATE

Here's your first model rocketry challenge. Kits may include laser cut balsa or card stock fins and/or parts. Some sanding and gluing is required as well as finishing your rocket with primer/paint and applying the rockets decals. **Build Time: 1-4 hours**



ADVANCED

You have knowledge and some experience under your belt and are ready for the next step! Builds are more involved with multiple parts. Finishing is more complex and may require multiple paints and/or masking. **Build Time: 4-8 hours**



EXPERT

You're a pro and ready for more! Kits in this category may require lengthy or complex building steps. These kits will test your skills and require an advanced knowledge of rocket building. Advanced finishing knowledge required. **Build Time: 6+ hours**



MASTER

You are ready for the ultimate challenge! You have expert knowledge in complex builds as well as working with multiple materials. These kits test all of your skills and require a keen eye for detail and precision! **Build Time: 8+ hours**

NAVIGATE OUR CATALOG WITH EASE!



QR Code to Rocket

Rocket Name

Rocket Size

Recovery Type

Projected Altitude

Recommended Engines

Product Number

Skill Level

ROCKET SCIENCE

Height: 12.6 in. (32 cm)

Diameter: 0.98 in. (25 mm)

Recovery: 12 in. parachute

Projected Altitude: 1,100 ft. (335 m)

Recommended Engines: 1/2A6-2, B4-4, B6-4, B6-6, C6-5, C6-7

#005326



For pricing & purchase, please visit [EstesRockets.com](https://www.EstesRockets.com)

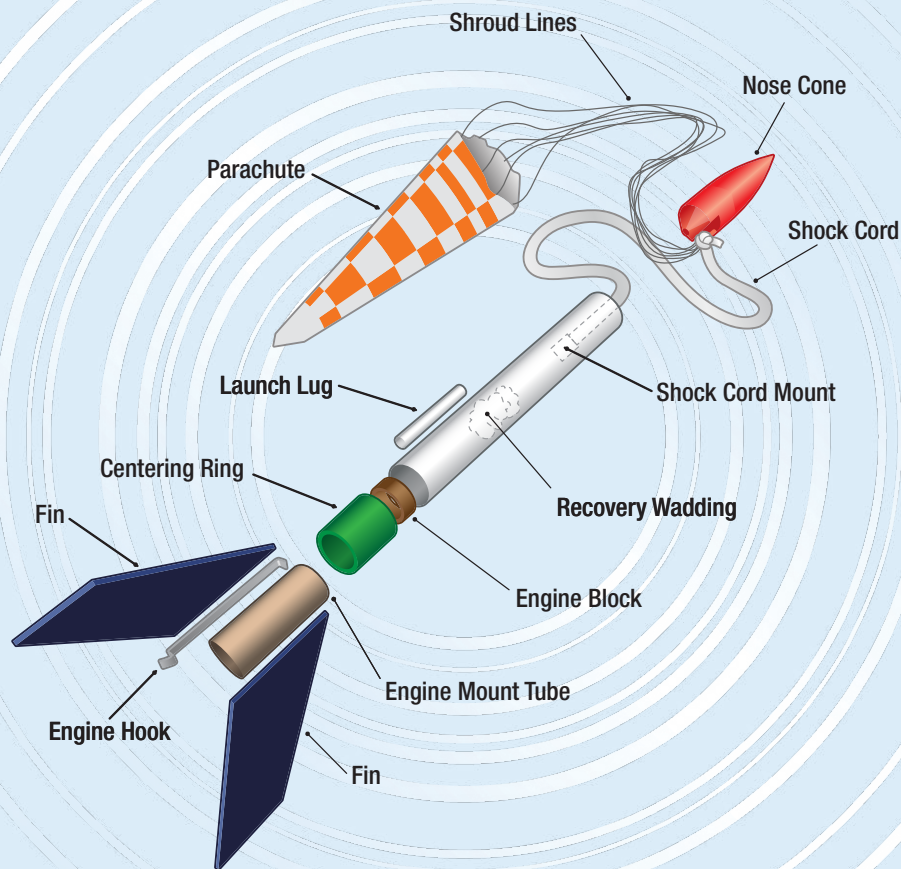
MODEL ROCKET BASICS

WHAT IS A FLYING MODEL ROCKET?

Estes flying model rockets are safe activity kits made of lightweight materials such as paper tubing, balsa wood, and plastic. Fins attached to the body tube help provide guidance and stability. An engine mount assembly holds the engine in place during rocket flight in most models.

HOW DOES A MODEL ROCKET WORK?

The Estes model rocket is propelled safely into the air by an electrically ignited model rocket engine. After its acceleration, the rocket continues upward, emitting tracking smoke as it coasts. At the rocket's peak altitude (also called apogee), a recovery device, such as a parachute or streamer, is deployed to return the rocket gently to earth. The rocket can then be prepared for another flight.



This diagram shows the basic components found in most model rocket kits. Model rocketry is recommended for ages 10 to adult. Adult supervision is suggested for those under 12 years of age.

LAUNCH SITE BASICS

WHERE TO SAFELY LAUNCH MODEL ROCKETS

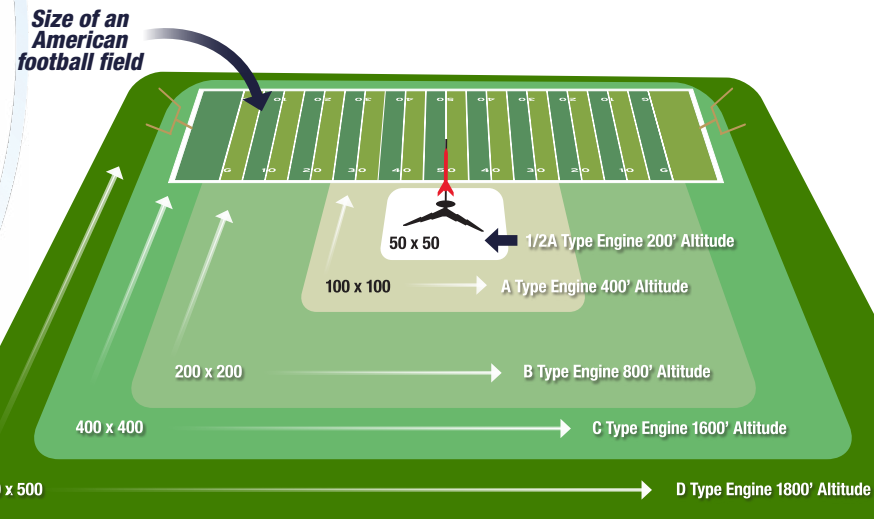
This chart tells you what size field to use for each size engine. For launch information, look at the "NAR Model Rocket Safety Code" (page 45). You should always check with your local city government for any special regulations that may apply to your area. Generally you can fly most Estes rockets in a clear area the size of a football or soccer field. Launch in little or no wind, and make sure there is no dry grass close to the launch pad or in the flying field. Each engine size is designated by a letter and is up to twice as powerful as the letter before it. See the engine section on pages 21-25 for more information.

LAUNCH SITE DIMENSIONS

Installed Total Impulse (N-sec)	Equivalent Motor Type	Minimum Site Dimensions (ft.)
0.00 - 1.25	¼ A, ½ A	50' x 50'
1.26 - 2.5	A	100' x 100'
2.51 - 5	B	200' x 200'
5.01 - 10	C	400' x 400'
10.01 - 20	D	500' x 500'
20.01 - 40	E	1,000' x 1,000'
40.01 - 80	F	1,000' x 1,000'

RECOMMENDED LAUNCH SITE AREA

Minimum launch site dimensions for circular area is diameter in feet, and for rectangular area is shortest side in feet. Choose a large field away from power lines, buildings, tall trees and low flying aircraft. The larger the launch area, the better your chance of recovering your rocket. Make sure the launch area is free of obstructions, dry weeds, brown grass or highly flammable materials. Football fields, parks and playgrounds are great. Launch only during calm weather with little or no wind and good visibility. The diagram below shows the minimum recommended launch areas.



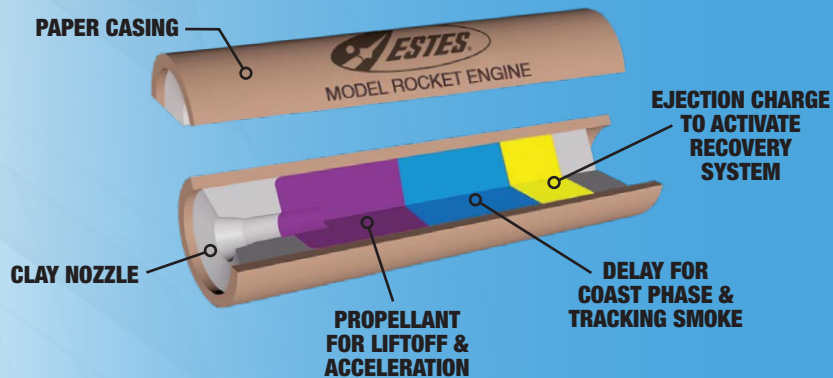
ENGINE BASICS

WHAT IS A MODEL ROCKET ENGINE?

Estes model rocket engines are used to safely launch a model rocket into the air. They are factory-assembled and comply with the safety requirements of the National Association of Rocketry. They are single use and range in power from A to F sizes. The engine is started using an electrical launch system that is powered by alkaline batteries.

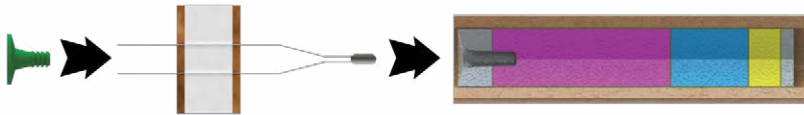


COMPONENTS OF A MODEL ROCKET ENGINE

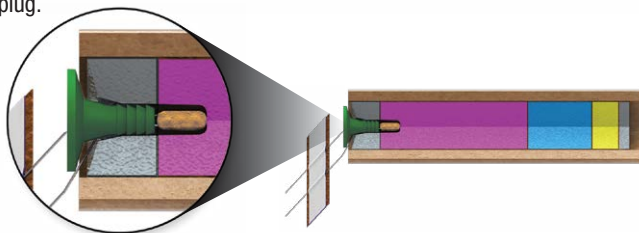


HOW TO PREPARE YOUR ROCKET ENGINE FOR A SAFE LAUNCH

1. Use the plug to secure the starter into the engine nozzle of your rocket engine.

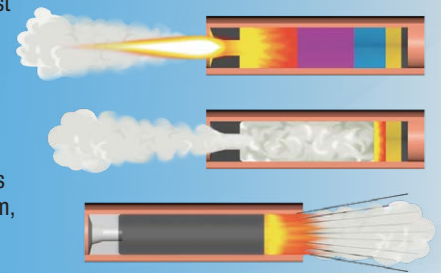


2. Make sure the starter is inserted into the engine nozzle and touches the propellant, then insert the plug.



HOW DOES A MODEL ROCKET ENGINE WORK?

1. When the engine is started, it produces thrust and boosts the rocket into the sky.
2. After the propellant is used up, the delay is activated, producing tracking smoke and allowing the rocket to coast.
3. After the delay is used, the ejection charge is activated, which deploys the recovery system, such as a parachute or streamer.



MODEL ROCKET ENGINE PHASE AND FLIGHT SEQUENCE

3. **ENGINE PHASE: COAST**
Model rocket streaks skyward to peak altitude.



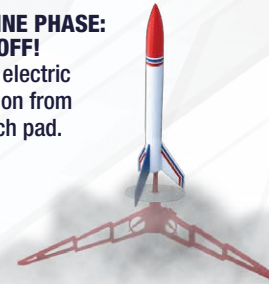
4. **ENGINE PHASE: EJECTION**
Model rocket reaches peak altitude and ejection charge deploys recovery system.



2. **ENGINE PHASE: THRUST**
High thrust and acceleration for powered flight.



1. **ENGINE PHASE: LIFTOFF!**
Safe electric ignition from launch pad.



5. **LANDING**
Touchdown and safe recovery... ready to blast off again!



Thanks to the recovery system, you can enjoy the thrill of launching Estes rockets over and over! Engines are single use, so you'll need a new engine for each launch.

READY FOR LIFTOFF

STARTER & LAUNCH SETS

**WHERE EVERY
ROCKETEER
BEGINS!**

STARTER SETS include everything you need to launch, all in one box.*

*Launch Controller requires 4-AA alkaline batteries sold separately.

Includes 3 engines and an Altitude Tracker!



STEM KIT

ROCKET SCIENCE

Height: 12.6 in. (32 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,100 ft. (335 m)
Recommended Engines: 1/2A6-2, A8-3, B4-4, B6-4, B6-6, C6-5, C6-7

#005326



SPACE 2 INSPIRE

Height: 20.4 in. (51.8 cm)
Diameter: 1.64 in. (41.7 mm)
Recovery: 15 in. parachute
Projected Altitude: 450 ft. (137 m)
Recommended Engines: C5-3, C6-3

#009428

STEM KIT

Learn more about Space2Inspire on page 28!



STARTER SET

MINI MOD

Height: 9-13 in. (23-33 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 600 ft. (183 m)
Recommended Engines: 1/2A3-2T, A3-4T, A3-6T, A10-3T

#003241



6 ways to fly!

MINI ALPHA

Height: 9.24 in. (23.5 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 690 ft. (210 m)
Recommended Engines: 1/2A3-2T, A3-4T, A10-3T

#005333

STARTER SET



STARTER SET

MINI BERTHA

Height: 9.96 in. (25.3 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 650 ft. (198 m)
Recommended Engines: 1/2A3-2T, A3-4T, A10-3T

#005332



MINI MAX

Height: 8.78 in. (22.3 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Streamer
Projected Altitude: 300 ft. (91 m)
Recommended Engines: 1/2A3-2T, A3-4T, A10-3T

#005337

STARTER SET



STARTER SETS

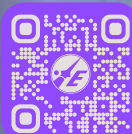


LAUNCH SET

ALPHA III

Height: 12.1 in. (30.7 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 12 in. parachute
 Projected Altitude: 1,150 ft. (351 m)
 Recommended Engines: 1/2A6-2,
 A8-3, A8-5, B4-4, B6-4,
 B6-6, C6-5, C6-7

#001427

**TANDEM X
AMAZON**

Height: 29.4 in. (74.7 cm)
 Diameter: 1.33 in. (34 mm)
 Recovery: 18 in. parachute
 Projected Altitude: 600 ft. (183 m)
 Recommended Engines: B4-2,
 B4-4, B6-2, B6-4, C5-3, C6-3, C6-5

CROSSFIRE ISX

Height: 15.6 in. (39.6 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 18 in. parachute
 Projected Altitude: 1,150 ft. (351 m)
 Recommended Engines: A8-3,
 B4-4, B6-4, C6-5, C6-7



#001469

LAUNCH SET

LAUNCH SET

**PATHFINDER
CELESTIAL EXPLORER**

Height: 20.3 in. (52 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 12 in. parachute
 Projected Altitude: 1,000 ft. (305 m)
 Recommended Engines: A8-3,
 B6-4, C6-5

PROSPECTOR

Height: 14 in. (35.6 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 12 in. parachute
 Projected Altitude: 1,000 ft. (305 m)
 Recommended Engines: A8-3,
 B6-4, C6-5

#003238

**YOUR NEXT LAUNCH!**

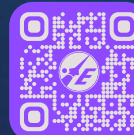
LAUNCH SETS include a rocket, launchpad,
 and controller. Engines, starters, plugs and
 recovery wadding sold separately.

LAUNCH SET

**RASCAL &
HIJINKS**

Height: 14.5 in. (36.8 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 12 in. parachute
 Projected Altitude: 1,100 ft. (335 m)
 Recommended Engines: A8-3,
 B4-4, B6-4, C6-5, C6-7

#001499

**TASER**

Height: 17 in. (43.2 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 12 in. parachute
 Projected Altitude: 1,100 ft. (335 m)
 Recommended Engines: A8-3,
 B4-4, B6-4, B6-6, C6-5, C6-7

#001491

LAUNCH SET

STEM KIT

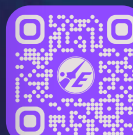
TRI-FLYER

Height: 24.6-25.1 in. (62.5-63.8 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 12 in. parachute
 Projected Altitude: 900 ft. (274 m)
 Recommended Engines:
 B6-2, B6-4, C5-3, C6-3

#000647



Three fins
 for triple
 the fun!

*Helicopter recovery!***ROTO ROCKET**

Height: 24.9 in. (63.1 cm)
 Diameter: 0.98 in. (25 mm)
 Recovery: 12 in. parachute
 Projected Altitude: 500 ft. (152.4 m)
 Recommended Engines:
 C5-3, C6-3



#000648

STEM KIT

LAUNCH SETS

FOUNDATIONS OF FLIGHT

BEGINNER KITS

"I'm genuinely unsure who had more fun: me or my 9-year-old...or maybe for those brief few seconds we were both 9 years old."

- Estes customer review



ORBITRON

Height: 26.2 in. (67 cm)
Diameter: 1.64 in. (42 mm)
Recovery: 12 in. parachute
Projected Altitude: 950 ft. (290 m)
Recommended Engines:
C11-3, C11-5, D12-5, D12-7

#007002



Payload compartment!

TRAILBLAZER TRIO

Height: 10.8-11.1 in. (27.4-28.2 cm)
Diameter: 0.74 in. (19 mm)
Recovery: 6 in. parachute
Projected Altitude: 550 ft. (168 m)
Recommended Engines:
1/2A3-4T, A3-4T, A10-3T

#000654



MINI MOD

Height: 9-13 in. (23-33 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 600 ft. (183 m)
Recommended Engines: 1/2A3-2T, A3-4T, A3-6T, A10-3T

#000663



Payload ready!

6 ways to build!

COSMIC CARGO

Height: 16.7 in. (42.4 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,000 ft. (305 m)
Recommended Engines: A8-3, A8-5, B4-4, B6-6, C6-5, C6-7

#001324

CELESTIAL EXPLORER

Height: 20.3 in. (52 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,000 ft. (305 m)
Recommended Engines: A8-3, B6-4, C6-5

#000689



PROSPECTOR

Height: 14 in. (35.6 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,000 ft. (305 m)
Recommended Engines:
A8-3, B6-4, C6-5

#003240



SUN-SATIONAL

Height: 17.5 in. (44.5 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,100 ft. (335 m)
Recommended Engines:
A8-3, B4-4, B6-4, C6-5, C6-7

#000899



BEGINNER

View all products at estesrockets.com/collections/beginner 13

EYES ON THE SKY

INTERMEDIATE KITS

"I first bought a Big Bertha in the late 1960s and have continued the tradition to purchase this particular rocket as it is easy to build and so much fun to launch. It is probably the most fun rocket I have built to watch go up."

- Estes customer review

NEW

BANSHEE

Height: 24.1 in. (61.2 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,000 ft. (305 m)
Recommended Engines: B4-4, B6-4, C6-5

#001303



BIG BERTHA

Height: 24 in. (61 cm)
Diameter: 1.64 in. (42 mm)
Recovery: 18 in. parachute
Projected Altitude: 500 ft. (152 m)
Recommended Engines: B4-2, B4-4, B6-2, B6-4, C6-5

#001948



D-REGION TOMAHAWK

Height: 38.8 in. (98.5 cm)
Diameter: 1.8 in. (46 mm)
Recovery: 24 in. parachute
Projected Altitude: 750 ft. (229 m)
Recommended Engines: D12-3, E12-4

#002037

THE MAVERICKS

Height: 11.7-13.8 in. (29.7-35 cm)
Diameter: 0.74 in. (18.8 mm)
Recovery: Streamer
Projected Altitude: 600 ft. (183 m)
Recommended Engines: 1/2A3-4T, A3-4T, A3-6T, A10-3T

#001366

NEW



KERBAL

Height: 19.3 in. (49 cm)
Diameter: 1.64 in. (42 mm)
Recovery: 15 in. parachute
Projected Altitude: 375 ft. (114 m)
Recommended Engines: C5-3, C6-3

#009726



Comes with Kerbonaut Jebediah figurine!



DER RED MAX

Height: 16.3 in. (41.4 cm)
Diameter: 1.64 in. (42 mm)
Recovery: 18 in. parachute
Projected Altitude: 600 ft. (183 m)
Recommended Engines: B4-2, B4-4, B6-2, B6-4, C6-5

#000651



Want it even bigger? See Pro Series II on page 33!



HYPER BAT

Height: 21.9 in. (55.6 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 2,125 ft. (648 m)
Recommended Engines:
Booster Stage: A8-0, B6-0, C6-0
Upper Stage: A8-5, B6-6, C6-5, C6-7

#007217



CHASING ALTITUDE

ADVANCED KITS

"Rocket building can be challenging...but stick with it. You don't have to be a genius, you just need curiosity, patience, and the willingness to learn from mistakes. Every setback is part of the learning process, and the results are worth it."

- Kennedy Drummond, U.S. Air Force Academy Cadet

Payload ready!

MAYHEM

Height: 33.6 in. (85.3 cm)
Diameter: 1.64 in. (42 mm)
Recovery: 18 in. parachute
Projected Altitude: 2,100 ft. (640 m)
Recommended Engines:
Two Stage Booster: D12-0, E12-0
Upper Stage: D12-5, D12-7, E12-6, E12-8

#001320

K-46 ASTRON SHRIKE

Height: 29.5 in. (75 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,500 ft. (457 m)
Recommended Engines:
Booster: A8-0, B6-0, C6-0
Upper Stage: A8-3, A8-5, B6-6, C6-5, C6-7

#001246

Payload ready!

MAYHEM



LASER X2

Height: 29.2 in. (74.2 cm)
Diameter: 1.64 in. (42 mm)
Recovery: 15 in. parachute
Projected Altitude: 450 ft. (137 m)
Recommended Engines: C5-3, C6-3

#007320



NEW

STAR WEAVER

Height: 17.3 in. (43.9 cm)
Diameter: 0.74 in. (18.8 mm)
Recovery: Streamer
Projected Altitude: 900 ft. (274.3 m)
Recommended Engines:
A10-0T, 1/2A3-4T, A3-4T, A3-6T

#000688

MERCURY REDSTONE

Height: 28.6 in. (72.6 cm)
Diameter: 2.05 in. (52 mm)
Recovery: 15 in. parachute
Projected Altitude: 200 ft. (61 m)
Recommended Engines: C5-3, C6-3

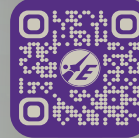
#001921

Three Engine Cluster!

TIMEWARP

Height: 25 in. (63.5 cm)
Diameter: 1.33 in. (34 mm)
Recovery: 15 in. parachute
Projected Altitude: 500 ft. (152 m)
Recommended Engines:
1/2A3-2T, A3-4T, A10-3T

#007321



ADVANCED

PRECISION AND POWER

EXPERT KITS

"I've been purchasing and building Estes model rockets since 1973. I have every current PSII series model and find the Vogel to be as excellently built as all the current models. Looking forward to launching this off my PSII Launch Rail!"

- Estes customer review

PROSERIES II

JAYHAWK

Height: 29.5 in. (75 cm)
Diameter: 2.5 in. (64 mm)
Recovery: 30 in. parachute
Projected Altitude: 900 ft. (274 m)
Recommended Engines:
F15-4, E16-4

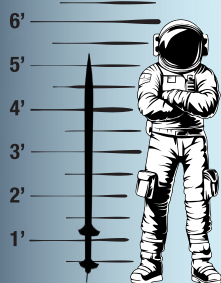
#009731

PROSERIES II

VOGEL

Height: 64.5 in. (164 cm)
Diameter: 2 in. (51 mm)
Recovery: 18 & 15 in. parachutes
Projected Altitude: 2,000 ft. (610 m)
Recommended Engines:
Booster Stage: E16-0, F15-0
Upper Stage: D12-5, E12-6, E16-6,
F15-6

#009728



Stands over 5 feet tall!

PROSERIES II

SOYUZ

Height: 41.3 in. (104.9 cm)
Diameter: 6.4 in. (16.3 cm)
Recovery: 24 & 18 in. parachutes
Projected Altitude: 500 ft. (152 m)
Recommended Engines: F15-4

#009732

Learn more about the
Soyuz on page 20!

PROSERIES II

ATHENA H

Height: 33.75 in. (85.7 cm)
Diameter: 2.22 in. (56.3 mm)
Recovery: 24 in. parachute
Projected Altitude: 1,200 ft. (366 m)
Recommended Engines: E16-4, F15-4

#009725

PROSERIES II

NEW GLENN

Height: 38.1 in. (96.9 cm)
Diameter: 2.76 in. (70 mm)
Recovery: 30 in. parachute
Projected Altitude: 500 ft. (152 m)
Recommended Engines: F15-4

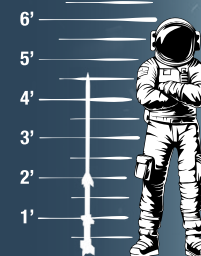
#009735

PROSERIES II

BLACK BRANT XII

Height: 54.6 in. (138.62 cm)
Diameter: 2.22 in. (53.3 mm)
Recovery: 24 in. parachute
Projected Altitude: 1,100 ft. (335 m)
Recommended Engines: E16-6,
F15-6

#009723



View all products at estesrockets.com/collections/expert

ROBERT GODDARD ROCKET

THE DAWN OF ROCKETRY

In the early morning chill of March 16, 1926, Dr. Robert H. Goddard stood in a snowy Massachusetts field with a dream and a hand-built rocket he called Nell. The rocket was small, slender, and unlike anything the world had seen before—powered not by gunpowder or solid fuel, but by a revolutionary liquid-fuel system that would one day send astronauts to the moon.

When Nell hissed to life and lifted off the launch frame, it climbed just 41 feet into the air before landing in a cabbage patch. To onlookers, it might have seemed like a small success. But for Dr. Goddard — and for the generations of rocketeers who followed — it marked the first step toward space exploration.

GODDARD ROCKET

Height: 23.9 in. (60.7 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 250 ft. (76.2 m)
Recommended Engines: A10-3T, A3-2T



#000664

Dr. Robert H. Goddard
Inventor of the first liquid-fueled rocket

SOYUZ

HISTORY, PERFECTED IN SCALE

BUILDING THE SOYUZ IS JUST THE BEGINNING. THE REAL MAGIC IS WATCHING IT TAKE FLIGHT FOR THE FIRST TIME.

Bring a legendary piece of space history to your collection, and your launch pad. The Estes Pro Series II Soyuz is a masterfully crafted 1:48 scale kit designed for serious builders and breathtaking flights. Packaged in a premium collector's box and engineered for authentic performance, this is more than a model, it's your chance to experience the Soyuz like never before.

"The new Estes Soyuz is the most remarkable model rocket kit ever offered, and I have never had a more rewarding build experience."

- James Duffy
YouTuber & Master Builder

SOYUZ

Height: 41.3 in. (104.9 cm)
Diameter: 6.4 in. (16.3 cm)
Recovery: 24 & 18 in. parachutes
Projected Altitude: 500 ft. (152 m)
Recommended Engines: F15-4



#009732

Learn more about
the Estes Soyuz!



John Boren
Estes Soyuz Designer

ENGINES

OUR WORLD FAMOUS ENGINES HAVE MADE MODEL ROCKETRY SAFE SINCE 1958!

Estes model rocket engines have been proven safe, consistent, and reliable in more than 500 million launches. Thousands of Estes engines are static-tested at the factory for reliability and adherence to performance specifications. All engines comply with the code requirements of the National Fire Protection Association, California Fire Marshal, and are certified by the National Association of Rocketry.



ENGINE TYPES

SINGLE STAGE - GREEN

For basic launches.

UPPER STAGE - PURPLE

Upper stage engines can be used as single stage engines in lightweight rockets.

BOOSTER - RED

Booster engines contain no delay.

PLUGGED - BLUE

Plugged engines are used for rocket-powered racers and contain no delay or ejection charge.



ENGINE CODES

LETTER = TOTAL IMPULSE

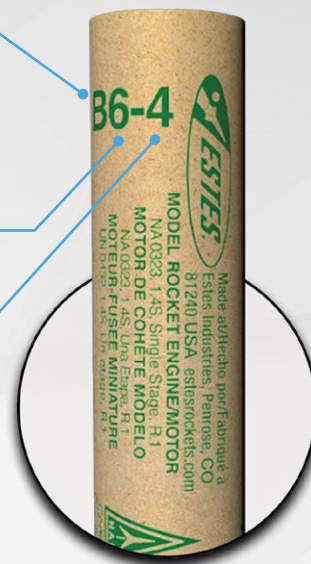
This letter is the total power (in Newton-seconds) produced by the engine. Each succeeding letter has up to twice the total power as the previous letter. (Example: 'B' engines have up to twice the power of 'A' engines, which results in approximately twice the altitude the rocket will reach.)

FIRST NUMBER = AVERAGE THRUST

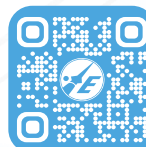
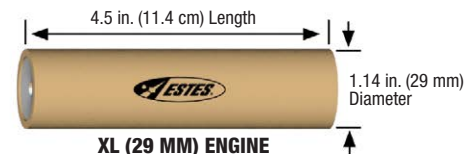
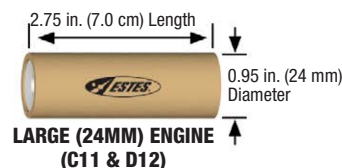
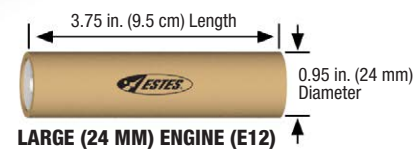
This number shows the engine's average thrust or how fast the engine powers the rocket to go. The higher the number, the faster the speed. It is measured in Newtons (4.45 Newtons = 1lb.).

SECOND NUMBER = TIME DELAY

This number gives you the time delay in seconds between the end of the thrust phase and the ignition of the ejection charge. Engine types ending in '0' have no time delay or ejection and are used for booster stages and special purposes only. Engines ending in 'P' have no time delay or ejection charge and the forward end is plugged.



ENGINE DIMENSIONS



STOCK UP ON ENGINES AT
ESTESROCKETS.COM!

ENGINE TYPES - PERFORMANCE CHART

OLD Prod. No.	NEW** Prod. No.	Engine Type	Total Impulse	Time Delay*	Est Max Lift Wt		Max Thrust		Thrust Duration	Initial Weight		Propellant Weight		Diameter	QTY Per Pack
					Oz	g	Newtons	Lbs		oz	g	oz	g		
SINGLE STAGE ENGINES															
1502	10010	1/4A3-3T	0.625	3	1.0	28	4.90	1.1	0.25	0.21	5.9	0.05	1.3	13	4
1503	10011	1/2A3-2T	1.25	2	2.0	57	8.30	1.9	0.30	0.23	6.4	0.07	1.9	13	4
1506	10012	A3-2T	2.50	2	2.0	57	6.80	1.5	0.60	0.25	7.1	0.12	3.3	13	4
1507	10013	A3-4T	2.50	4	2.0	57	6.80	1.5	0.60	0.26	7.4	0.12	3.3	13	4
1508	10014	A3-6T	2.50	6	2.0	57	6.80	1.5	0.60	0.27	7.7	0.12	3.3	13	4
1511	10015	A10-3T	2.50	3	3.0	85	13.00	2.9	0.80	0.29	8.1	0.12	3.5	13	4
1593	10016	1/2A6-2	1.25	2	2.0	57	8.90	2.0	0.30	0.48	13.6	0.10	2.7	18	3
1598	10017	A8-3	2.50	3	3.0	85	10.70	2.4	0.50	0.55	15.5	0.14	4.1	18	3
1601	10018	B4-2	5.00	2	4.0	113	13.20	3.0	1.10	0.66	18.6	0.27	7.6	18	3
1602	10019	B4-4	5.00	4	3.5	99	13.20	3.0	1.10	0.68	19.2	0.27	7.6	18	3
1605	10020	B6-2	5.00	2	4.5	127	12.10	2.7	0.80	0.61	17.3	0.23	6.5	18	3
1606	10021	B6-4	5.00	4	4.0	113	12.10	2.7	0.80	0.63	17.8	0.23	6.5	18	3
1617	10022	C5-3	10.00	3	8.0	227	20.40	4.6	1.85	0.83	23.6	0.39	11	18	3
1613	10023	C6-3	10.00	3	4.0	113	15.30	3.4	1.60	0.83	23.4	0.43	12.2	18	3
1614	10024	C6-5	10.00	5	4.0	113	15.30	3.4	1.60	0.85	24.0	0.43	12.2	18	3
1522	10025	C11-3	10.00	3	6.0	170	22.10	4.9	0.80	1.13	32.1	0.44	12.4	24	2
1523	10026	C11-5	10.00	5	5.0	142	22.10	4.9	0.80	1.18	33.4	0.44	12.4	24	2
1566	10027	D12-3	20.00	3	14.0	396	32.90	7.4	1.60	1.57	44.5	0.85	24.2	24	2
1567	10028	D12-5	20.00	5	10.0	283	32.90	7.4	1.60	1.61	45.7	0.85	24.2	24	2
1692	10029	E12-4	30.00	4	17.0	482	30.60	6.9	2.70	2.16	61.2	1.30	36.9	24	3
1693	10030	E12-6	29.50	6	14.0	397	29.60	6.7	2.70	2.23	63.2	1.30	36.9	24	3
1651	10031	F15-4	49.61	4	21.0	595	25.26	5.7	3.45	3.59	101.5	2.12	60	29	2
1652	10032	F15-6	49.61	6	17.0	482	25.26	5.7	3.45	3.66	103.7	2.21	60	29	2
1696	10033	E16-4	33.68	4	20.0	566	26.44	5.9	2.09	2.86	81.0	1.41	40	29	2
1697	10034	E16-6	33.68	6	16.0	453	26.44	5.9	2.09	2.92	82.7	1.41	40	29	2
UPPER STAGE ENGINES															
1504	10035	1/2A3-4T	1.25	4	1.0	28	8.30	1.9	0.30	0.23	6.6	0.07	1.9	13	4
1599	10036	A8-5	2.50	5	2.0	57	13.30	3.0	0.50	0.55	15.7	0.14	4.1	18	3
1607	10037	B6-6	5.00	6	2.5	71	12.10	2.7	0.80	0.64	18.2	0.23	6.5	18	3
1615	10038	C6-7	10.00	7	2.5	71	15.30	3.4	1.60	0.85	24.3	0.43	12.2	18	3
1524	10039	C11-7	10.00	7	4.0	113	22.10	4.9	0.80	1.19	33.8	0.44	12.4	24	2
1568	10040	D12-7	20.00	7	8.0	226	32.90	7.4	1.60	1.62	46.0	0.85	24.2	24	2
1694	10041	E12-8	29.80	8	12.0	340	31.80	7.1	2.70	2.24	63.5	1.30	36.9	24	3
1653	10042	F15-8	49.61	8	15.0	425	25.26	5.7	3.45	3.69	104.4	2.12	60	29	2
1698	10043	E16-8	33.68	8	14.0	396	26.44	5.9	2.09	2.99	84.7	1.41	40	29	2
BOOSTER STAGE ENGINES															
1510	10044	A10-0T	2.50	NONE	4.0	113	13.00	2.9	0.80	0.24	6.8	0.12	3.5	13	4
1600	10045	A8-0	2.50	NONE	3.0	85	13.30	3.0	0.30	0.47	13.5	0.14	4.1	18	3
1608	10046	B6-0	5.00	NONE	4.0	113	12.10	2.7	0.80	0.55	15.7	0.23	6.5	18	3
1616	10047	C6-0	10.00	NONE	4.0	113	15.30	3.4	1.60	0.76	21.4	0.43	12.2	18	3
1521	10048	C11-0	10.00	NONE	6.0	170	22.10	4.9	0.80	1.03	29.2	0.44	12.4	24	2
1565	10049	D12-0	20.00	NONE	14.0	396	32.90	7.4	1.60	1.43	40.4	0.84	23.8	24	2
1691	10050	E12-0	28.80	NONE	16.0	454	31.30	7.0	2.60	2.05	58.1	1.30	36.9	24	3
1650	10051	F15-0	49.61	NONE	19.0	539	25.26	5.7	3.45	3.32	94.0	2.12	60	29	2
1695	10052	E16-0	33.68	NONE	18.0	509	26.44	5.9	2.09	2.58	73.2	1.41	40	29	2



SCAN FOR THE ENGINE PERFORMANCE POSTER DOWNLOAD!

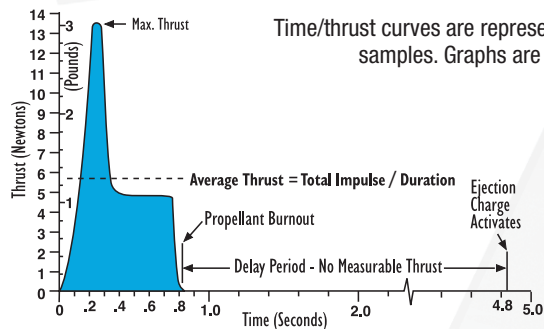
There are four mini-engines per package. All other engines are two or three per package. NOTE: The 'T' designates a mini-engine. All Estes engines come complete with starters and starter plugs.

*Delays have a tolerance of 1.5 seconds or 20%, whichever is greater. The data listed above is from randomly chosen production samples.

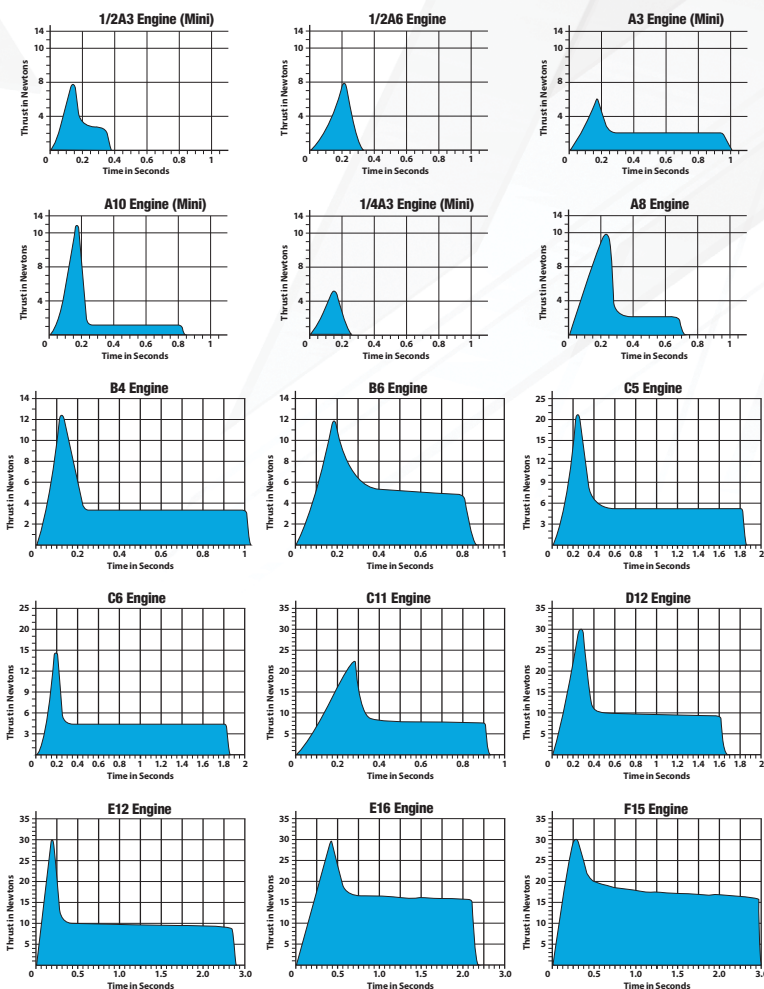
**Estes is changing our engine packaging to a new re-sealable flex bag. This change is completing rollout in 2026 based on inventory levels of current engine stock. During this change, the old product numbers will be updated to correspond with the new bag packaging for that engine type. Customers will still be able to search by the old PN or new PN on [EstesRockets.com](https://www.EstesRockets.com) until further notice.

ENGINE THRUST CURVES

KEY



Scan for the Engine Performance Poster!



Designer
Signature Series™

LASER X2

REINVENTING AN ICONIC ROCKET

Centuri Engineering founder Lee Piester designed the original Laser-X Space Probe in 1969, the same year the U.S. landed on the moon. Centuri's designers were still imagining what the spacecraft of the future might look like. The iconic Laser-X design is considered one of the earliest futuristic model rocket kits that expanded design beyond just a tube, fins, and nose cone.

56 years after its release, Lee Piester himself teamed up with Estes to redesign the kit with features he wish he could have included in the original 1960's version.



LASER X2

Height: 29.2 in. (74.2 cm)

Diameter: 1.64 in. (42 mm)

Recovery: 15 in. parachute

Projected Altitude: 450 ft. (137 m)

Recommended Engines: C5-3, C6-3



#007320



BASED ON THE
ORIGINAL ROCKET
DESIGN BY LEE
PIESTER

Lee Piester

Lil' SPITE™

BUILD IT. LAUNCH IT. PUSH BEYOND WHAT YOU THOUGHT WAS POSSIBLE. JUST LIKE XYLA, YOU CAN BE THE HERO OF YOUR OWN STORY.



The Estes Pro Series II™ Lil' Spite™ is more than just another rocket, it's a work of engineering artistry. Developed in collaboration with engineer and YouTube star Xyla Foxlin, Lil' Spite brings her original high-power design into the hands of hobbyists everywhere. This mid-power rocket blends precision engineering with bold styling, giving you a model that's as exciting to build as it is to fly.

1

LIL' SPITE

Height: 51.8 in. (131.6 cm)
Diameter: 2 in. (50.8 mm)
Recovery: 18 in. parachute
Projected Altitude: 1,200 ft. (365 m)
Recommended Engines:
D12-3, E12-4, E16-6, F15-6

#009737

**TRASH
PANDA**

**CARBON
FIBER
DECALS**

"I do a lot of work with STEM education and getting people interested, but also pushing the limits of what's possible. I think we've created a kit that does both."

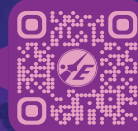
- Xyla Foxlin, Engineer & YouTube Creator

DOCTOR PROCTOR'S SPACE 2 INSPIRE

A REVOLUTIONARY FUSION OF SCIENCE, ART, AND EDUCATION

Dr. Sian Proctor is an astronaut, artist, and geoscientist renowned for her contributions to space science and art. Designed in collaboration with Estes, Dr. Proctor brings her creative vision to this one-of-a-kind rocket kit, making it perfect for young explorers eager to blend creativity with STEM learning! Space2Inspire is a fantastic way for students to dive into the exciting world of rocketry, while also exploring concepts of light, color, and self-expression in the digital activity booklet. With everything needed to launch included in the box, students can get hands-on experience with aerospace concepts and rocket launching!

See more product info on page 7!



**DR. PROCTOR'S
ARTWORK**

SPACE 2 INSPIRE

2

Height: 20.4 in. (51.8 cm)
Diameter: 1.64 in. (41.7 mm)
Recovery: 15 in. parachute
Projected Altitude: 450 ft. (137 m)
Recommended Engines: C5-3, C6-3

#009428

**COLOR CHANGING
FINS**

Dr. Sian Proctor was the mission pilot for Space X Inspiration4 and is the first African American woman to pilot a spaceship! She is also a space artist and poet. Estes proudly features her artwork on this rocket.



LEGENDS OF FLIGHT

SCALE MODELS

Ready-to-fly models perfect for flight and display!

"My dad is a rocket engineer and so I got him [the ULA Vulcan]! Turns out, he had an Estes rocket as a kid in the 70's that he launched. He's so happy to have one that marks how much he has accomplished in his career."

- Estes customer review

SPACE SHUTTLE

Height: 10.9 in. (27.7 cm)
Diameter: 1.64 in. (41.5 mm)
Recovery: 15 in. parachute
Projected Altitude: 600 ft. (182 m)
Recommended Engines: C5-3, C6-3

#009991

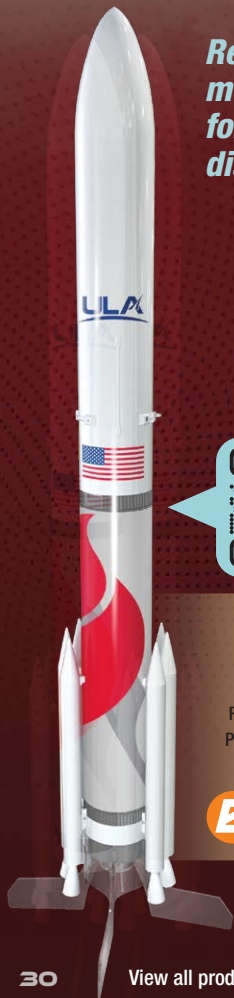


ULA VULCAN

Height: 25.7 in. (65.3 cm)
Diameter: 2.07 in. (52.6 mm)
Recovery: 9 & 24 in. parachutes
Projected Altitude: 300 ft. (92 m)
Recommended Engines: D12-3, E12-4



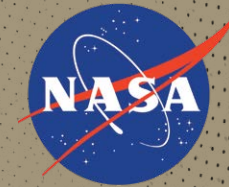
#002209



NASA SLS

Height: 19.4 in. (49.3 cm)
Diameter: 1.64 in. (42 mm)
Recovery: 15 in. parachute
Projected Altitude: 350 ft. (107 m)
Recommended Engines: C5-3, C6-3

#002206



SATURN V

Height: 21.8 in. (55.4 cm)
Diameter: 1.98 in. (50 mm)
Recovery: 18 in. parachute
Projected Altitude: 200 ft. (61 m)
Recommended Engines: C5-3, C6-3

#002160



NEW GLENN

Height: 19.5 in. (49.5 cm)
Diameter: 1.35 in. (34.3 mm)
Recovery: 15 in. parachute
Projected Altitude: 450 ft. (137 m)
Recommended Engines: B4-2, B6-2, C5-3, C6-3

#009003



NEW SHEPARD

Height: 10.3 in. (26.3 cm)
Diameter: 1.78 in. (45.2 mm)
Recovery: 15 in. parachute
Projected Altitude: 400 ft. (122 m)
Recommended Engines: C5-3, C6-3

#002198





wholesale

SELL SMARTER. LAUNCH STRONGER.

**EVERYTHING YOU
NEED TO GROW
YOUR BUSINESS,
STRAIGHT FROM
ESTES.**

FREE SHIPPING

Orders over \$750 ship free.

LOW MINIMUMS

\$150 minimum order keeps
restocking simple.

PREORDER PROGRAM

Lock in inventory early with our
flexible pay-later model.

RETAIL SUPPORT

Promotional tools and resources,
ready to use.



**BECOME AN
AUTHORIZED
ESTES RESELLER**
b2b.estesrockets.com

LAUNCH YOUR BRAND TO NEW HEIGHTS

YOUR BRAND, POWERED BY ESTES ROCKETS

Estes offers a turnkey White Label program that enables organizations to launch high-quality model rocketry under their own brand. Proven designs and reliable manufacturing ensure consistent results while supporting a polished, branded experience. White Label solutions are ideal for education programs, corporate STEM initiatives, camps, museums, and promotional partners seeking scalable, branded products. Customization options support unique objectives while maintaining safety, reliability, and performance. Backed by decades of rocketry heritage, Estes provides a trusted foundation for programs that demand quality at every stage.

READY FOR ANY MISSION

Built to adapt to your brand and vision, Estes White Label delivers the proven performance of flight tested rockets with the flexibility to support a wide range of programs and markets. From custom branding and packaging to accessible order quantities and reliable U.S. based manufacturing, every detail is designed to simplify execution and support long term growth. Backed by dedicated partnership support, Estes provides a trusted foundation to help you launch with confidence and scale at your own pace.



**EXPLORE
WHITE LABEL
OPPORTUNITIES**
b2b.estesrockets.com/whitelabel

PRO SERIES II ACCESSORIES

PRO SERIES II

LAUNCH CONTROLLER

Ignite single or two-engine
cluster rockets
30 feet (9.1 m) of heavy-duty
cable with four alligator clips
Runs on 6 C alkaline batteries
or external power source

#002240

LI-PO POWER BATTERY

Essential for cluster launches
Rechargeable 800 mAh 11.1V
50C battery with charger
Pairs seamlessly with the Pro
Series II Launch Controller.

#002217

LAUNCH PAD

Two-piece, threaded 1/4 in. x
60 in. steel launch rod
5 in. galvanized blast plate
Stable, removable PVC
tube legs

#003552

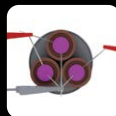
ENGINE CONFIGURATIONS FOR CLUSTER LAUNCH



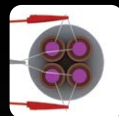
Single Engine



Two Engine



Three Engine



Four Engine

NEW



**SEE MORE
PRO SERIES II
ACCESSORIES!**

THE ART OF FLIGHT

MASTER KITS

**OUR MOST
CHALLENGING
BUILDS!**

SATURN V

Height: 43.3 in. (109.9 cm)
Diameter: 3.94 in. (100.1 mm)
Recovery: 18 & 24 in. parachutes
Projected Altitude: 350 ft. (106.7 m)
Recommended Engines:
E16-4, F15-4

#001967



ODYSSEY

Height: 22.7 in. (57.7 cm)
Diameter: 1.33 in. (34 mm)
Recovery: 18 in. parachute
Projected Altitude: 950 ft. (290 m)
Recommended Engines:
C11-3, D12-5

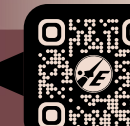
#007235



SATURN 1B

Height: 26.8 in. (68.1 cm)
Diameter: 2.62 in. (67 mm)
Recovery: 18 in. parachute
Projected Altitude: 1,000 ft. (305 m)
Recommended Engines:
C11-3, D12-3, E12-4, E12-6

#007251



EXPLORER AQUARIUS

Height: 21.8 in. (55.4 cm)
Diameter: 2.75 in. (70 mm)
Recovery: 18 in. parachute
Projected Altitude: 750 ft. (229 m)
Recommended Engines:
D12-3, D12-5, E12-4, E12-6

#007253



View all products at estesrockets.com/collections/master

STEM IN MOTION

ESTES EDUCATION

"Instead of just learning equations or principles in the classroom...I was actively applying concepts like drag calculation, thrust-to-weight ratios, and the relationship between center of pressure and center of gravity for a real purpose, not just for a test I'd forget afterward, but in a way that truly helped me understand and remember the material."

- Kennedy Drummond, U.S. Air Force Academy Cadet

TAKE LEARNING TO NEW HEIGHTS

Inspire your students to imagine the limitless possibilities in aerospace with our line of model rocketry education products.

Develop 21st century skills with your students through lesson plans that promote communication, creativity, collaboration, and critical thinking.

Use our free resources to gain confidence and effectively teach STEM topics while promoting real world learning.

Create lifelong memories in your classroom with hands on learning that inspires and ignites creativity. Aerospace careers start with Estes.



SET UP AN
EDUCATION
ACCOUNT TO
**SAVE
20%**
FOR YOUR
ORGANIZATION



education RESOURCES

LESSON AND UNIT PLANS

Our free plans cover a range of topics from STEM to ELA to history! They include student portfolios, NGSS and Common Core Standards, slide presentations, and assessments. Find the right plan for your students at edu.estesrockets.com!



VIDEO RESOURCES

Check out our YouTube channel for How-To videos, rocket builds, and more!



REAL DATA COLLECTION

Explore physics, engineering, chemistry, and more by pairing data collection tools with rocketry! Accelerometers from top classroom brands like PASCO, Vernier, and PocketLab are perfect additions. Scan below to get your Voyager Sensor from PocketLab.



FIND ALL OF OUR RESOURCES AT

EDU.ESTESROCKETS.COM

ESTES EDUCATION

AMERICAN ROCKETRY CHALLENGE

Get supplies and resources to compete in the world's largest student rocket competition!

COMPETITION KIT

This all-in-one parts bundle is the perfect foundation for competitive rocketry.

PRO SERIES II PARTS ASSORTMENT

An advanced building resource kit for classrooms, camps, and competitions.



NEW



LEARN MORE AT
ROCKETRYCHALLENGE.ORG

RESOURCES
& SUPPLIES

FIRE ROCKET CHALLENGE

Get everything you need to participate in this nationwide challenge!

GREEN EGGS BULK PACK



LEARN MORE AT
FIREROCKETS.ORG

COSMIC RAY CLASSROOM KIT BUNDLE

Everything you need to bring hands-on rocketry into your classroom and create meaningful STEM experiences. The bundle includes:

- 12 Cosmic Ray rockets
- 24 A8-3 engines
- Lifetime Launch System
- Pro Series II Launch Controller
- 10 different Lesson Plans



ROCKET BULK PACKS

Bulk packs come with 12 rockets and pair perfectly with our lesson plans. Beginner kits take 1 hour or less to assemble, while intermediate kits can be built in 2 hours or less.

BEGINNER KITS

Alpha III - #001751
Cosmic Ray - #001112
Cosmic Cargo - #001752
Cosmic Cascade - #007001
Color the Sky - #001715
Star Hopper - #001721
Gnome - #001749
Mini Mod - #001739
Orbitron - #001740
Generic E2X - #001764

INTERMEDIATE KITS

AVG - #001753
Alpha - #001756
Wizard - #001754
Green Eggs - #001718
Viking - #001755
Orbis 3D - #001706



HIGHER THAN YOU THINK!

"My classroom absolutely loved building and launching the Cosmic Cargo Rockets. We used multiple devices for measuring the height of the rocket. With a C6-5 we obtained altitudes of 1,000-1,400 feet. Much higher than we could have hoped for or expected."

- Estes customer review

COSMIC CARGO

Height: 16.7 in. (42.4 cm)
Diameter: 0.98 in. (25 mm)
Recovery: 12 in. parachute
Projected Altitude: 1,000 ft. (305 m)
Recommended Engines: A8-3,
A8-5, B4-4, B6-6, C6-5, C6-7

#001752



ESTES EDUCATION

ENGINE BULK PACKS

Every launch requires engines, recovery wadding, starters, and plugs. These convenient engine bulk packs include enough of each for multiple launches. Choose from a variety of engine sizes—we advise using the smallest recommended engines for the first launches. Learn how to find the perfect engine on page 22.

1/2A3-4T ENGINES (24)

#001788 - 30 starters; 24 plugs; 72 sheets wadding

A8-3 ENGINES (24)

#001781 - 30 starters; 24 plugs; 72 sheets wadding

B6-4 ENGINES (24)

#001783 - 30 starters; 24 plugs; 72 sheets wadding

B6-0/B6-6 ENGINES (12 EA)

#001784 - 30 starters; 24 plugs; 72 sheets wadding

C6-5 ENGINES (24)

#001789 - 30 starters; 24 plugs; 72 sheets wadding

C11-3 ENGINES (12)

#001726 - 20 starters; 16 plugs; 144 sheets wadding

D12-5 ENGINES (12)

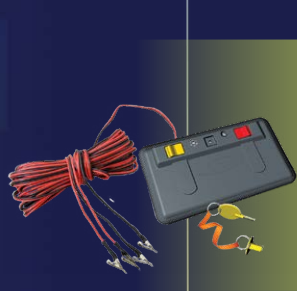
#001786 - 20 starters; 16 plugs; 144 sheets wadding

BLAST-OFF® FLIGHT PACK A8-3, B6-4, C6-3, C6-5 ENGINES (6 EA)

#001672 - 30 starters; 8 plugs; 72 sheets wadding



ACCESSORIES



LIFETIME LAUNCH SYSTEM

Designed for teachers and students to withstand the rigors of multiple launches. Includes a Pro Series II controller with 30 feet of cable, and 1/8 in. and 3/16 in. tilttable launch rods.

#002310



ALL ACCESSORIES

ALTIMETER

The Estes altimeter records heights up to 10,000 feet. It easily hooks onto the nose cone of your rocket and inserts into the body tube right above the parachute. Store up to 10 flights. Battery included.

#002246



THE ROCKETEER'S WORKSHOP

LAUNCH SUPPLIES & ACCESSORIES



ARAMID CORD

FIN MARKING GUIDE

DISPLAY STAND

BODY TUBES & COUPLERS

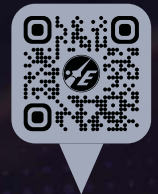
RIP STOP PARACHUTES

GET YOUR ACCESSORIES, PARACHUTES, BUILDING SUPPLIES, AND MORE AT ESTESROCKETS.COM!

From essentials like launch pads and controllers to alignment guides for the experienced builder, we have it all.



LAUNCH SUPPLIES



BUILDING SUPPLIES

APPAREL & GIFTS

**SHOW OFF YOUR FAVORITE ROCKETS
AND FLY IN STYLE ALL YEAR LONG!**



SATURN V + SATURN 1B 500 PC PUZZLE

Introducing the NASA Saturn V & Saturn 1B 500 Piece Puzzle from Estes – a unique addition to our product lineup that combines fun and history in one thrilling challenge! This high-quality, 500-piece puzzle features sharp, vibrant graphics of the iconic Saturn V and Saturn 1B rockets, two of the most powerful and significant rockets ever built!

#000510

NASA SLS HOODIE

Featuring double-needle stitching at the waistband and cuffs, the sweatshirt promises not only interstellar style but also lasting durability. The double-lined hood, complete with a dyed-to-match drawcord, provides a cozy haven, embodying the spirit of cosmic exploration.

Sizes: Youth XL, Small, Medium, Large, XL, 2XL, 3XL, 4XL

#10002-S

ALPHA HOODIE

Embark on a cosmic journey with the Alpha Zip Up Hoodie, a tribute to the iconic Estes Alpha rocket that revolutionized model rocketry in 1962. This hoodie captures the spirit of exploration and innovation that defined the historic era.

Sizes: Youth XL, Small, Medium, Large, XL

#10011-S

ARTWORK POSTERS & MORE!

Bring the spirit of adventure into your home with Estes posters and limited edition artwork. Celebrate all your favorite rockets, from the retro classics to the space-age explorers.

See all gifts and accessories at estesrockets.com!



SHOP NATIONAL ASSOCIATION OF ROCKETRY APPAREL

NAR UV SUN SHIRT

This lightweight, breathable long-sleeve shirt shields you from harmful UV rays during all-day outdoor events with UPF 50+ sun protection. Look sharp and stay safe—because rocketry is more than a hobby, it's a mission.

Sizes: Small, Medium, Large, XL, 2XL, 3XL, 4XL

#10018-S4XL

SATURN V TEE

Celebrate the legacy of space exploration with our exclusive Saturn V model rocket T-shirt, designed for rocketry enthusiasts and space aficionados!

Sizes: Youth XL, Small, Medium, Large, 2XL, 3XL, 4XL

#10010-YXL

SHOP ALL APPAREL & GIFTS



BIG BERTHA TEE

Adorned with the iconic yellow color of the Bertha rockets, this shirt combines comfort and style. Whether you're at the launch site or out and about, the Big Bertha™ T-shirt is the perfect addition!

Sizes: Youth Small, Small, Medium, Large, 2XL, 3XL, 4XL

#10011-S

#10004-S





Estes encourages membership in the
NATIONAL ASSOCIATION OF ROCKETRY
<https://www.nar.org>

MODEL ROCKET SAFETY CODE
(Basic Version - Effective August 2012)

- 1. MATERIALS.** I will use only lightweight, non-metal parts for the nose, body, and fins of my rocket.
- 2. MOTORS.** I will use only certified, commercially-made model rocket motors, and will not tamper with these motors or use them for any purposes except those recommended by the manufacturer.
- 3. IGNITION SYSTEM.** I will launch my rockets with an electrical launch system and electrical motor igniters. My launch system will have a safety interlock in series with the launch switch, and will use a launch switch that returns to the "off" position when released.
- 4. MISFIRES.** If my rocket does not launch when I press the button of my electrical launch system, I will remove the launcher's safety interlock or disconnect its battery, and will wait 60 seconds after the last launch attempt before allowing anyone to approach the rocket.
- 5. LAUNCH SAFETY.** I will use a countdown before launch, and will ensure that everyone is paying attention and is a safe distance of at least 15 feet away when I launch rockets with D motors or smaller, and 30 feet when I launch larger rockets. If I am uncertain about the safety or stability of an untested rocket, I will check the stability before flight and will fly it only after warning spectators and clearing them away to a safe distance. When conducting a simultaneous launch of more than ten rockets I will observe a safe distance of 1.5 times the maximum expected altitude of any launched rocket.
- 6. LAUNCHER.** I will launch my rocket from a launch rod, tower, or rail that is pointed to within 30 degrees of the vertical to ensure that the rocket flies nearly straight up, and I will use a blast deflector to prevent the motor's exhaust from hitting the ground. To prevent accidental eye injury, I will place launchers so that the end of the launch rod is above eye level or will cap the end of the rod when it is not in use.

- 7. SIZE.** My model rocket will not weigh more than 1500 grams (53 ounces) at liftoff and will not contain more than 125 grams (4.4 ounces) of propellant or 320 N-sec (71.9 pound-seconds) of total impulse.
- 8. FLIGHT SAFETY.** I will not launch my rocket at targets, into clouds, or near airplanes, and will not put any flammable or explosive payload in my rocket.
- 9. LAUNCH SITE.** I will launch my rocket outdoors, in an open area at least as large as shown in the accompanying table, and in safe weather conditions with wind speeds no greater than 20 miles per hour. I will ensure that there is no dry grass close to the launch pad, and that the launch site does not present risk of grass fires.

LAUNCH SITE DIMENSIONS

Installed Total Impulse (N-sec)	Equivalent Motor Type	Minimum Site Dimensions (ft.)
0.00-1.25	1/4A, 1/2A	50
1.26-2.50	A	100
2.51-5.00	B	200
5.01-10.00	C	400
10.01-20.00	D	500
20.01-40.00	E	1000
40.01-80.00	F	1000
80.01-160.00	G	1000
160.01-320.00	Two Gs	1500

- 10. RECOVERY SYSTEM.** I will use a recovery system such as a streamer or parachute in my rocket so that it returns safely and undamaged and can be flown again, and I will use only flame-resistant or fireproof recovery system wadding in my rocket.
- 11. RECOVERY SAFETY.** I will not attempt to recover my rocket from power lines, tall trees, or other dangerous places.

INDEX

ROCKETS

Alpha III	9
Athena H	18
Banshee	13
Big Bertha	13
Black Brant XII	18
Celestial Explorer	12
Cosmic Cargo	12, 40
Crimson Fury	34
Der Red Max	14
D-Region Tomahawk	14
Explorer Aquarius	36
Goddard Rocket	19
Great Goblin	34
Green Eggs	40
Hyper Bat	14
Jayhawk	17
K-46 Astron Shrike	15
Kerbal Rocket	14
Laser-X2	16, 26
Lil' Spite	27
Mayhem	15
Mega Der Red Max	33
Mercury Redstone	16
Mini Alpha	8
Mini Bertha	8
Mini Max	8

Mini Mod	8, 12
NASA SLS	30
New Glenn	18, 30
New Shepard	30
Nike Smoke	34
Odyssey	36
Optima	33
Orbitron	11
Pathfinder	9
Prospector	12
Rascal & Hijinks	10
Rocket Science	7
Roto Rocket	10
Saturn 1B	36
Saturn V	30, 36
Scorpio 3D	34
Soyuz	18, 20
Space2Inspire	7, 28
Space Shuttle	29
Star Weaver	16
Sun-sational	12
Tandem X	9
Taser	10
The Mavericks	14
Timewarp	16
Trailblazer Trio	11
Tri-Flyer	10

ULA Vulcan	29
Vogel	17

ENGINES

Engines	5, 21, 22, 23, 25
---------	-------------------

LAUNCH SUPPLIES, BUILDING SUPPLIES, ACCESSORIES, & APPAREL

Alpha Hoodie	43
Big Bertha T-Shirt	44
Building Supplies	42
Der Red Max Shirt	43
Estes Education Accessories	41
Launch Supplies	42
NAR UV Sun Shirt	44
NASA Puzzle	43
NASA SLS Sweatshirt	43
Pro Series II Launch Controller	35
Pro Series II Launch Pad	35
Pro Series II Li-Po Power Battery	35
Saturn V T-Shirt	44

ESTES WARRANTY STATEMENT

Estes model rocket products are warranted against defects in materials or workmanship for one year from the date of the original purchase. If the Estes product, because of a manufacturing mistake, malfunctions or proves to be defective within the one-year warranty period, it will be repaired or replaced, at Estes' option and at no charge to you.

This warranty does not cover incidental or consequential damage to persons or property caused by the use, abuse, misuse, failure to comply with operating instructions or improper storage of the warranted products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

For repair or replacement under this warranty, please contact us at EstesRockets.com or by mail at Estes Industries, LLC, Customer Service Department, 1295 H Street, Penrose, Colorado 81240-9698. For customer service, call (719) 372-5214.

Availability may be subject to change without notice. Color of products may vary.

©2026 Estes Industries, LLC
1295 H Street, Penrose, CO 81240-9698
All rights reserved. Printed in USA.
PN-2930 (1-26)

WARNING: This product can expose you to silica, which is known to the state of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

All Estes model rocket engine packaging carries this warning.

WARNING: Drilling, sawing, sanding, or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information, go to www.P65Warnings.ca.gov/wood.

Estes Rockets that contain wood parts or components carry this warning.

SPITE™



Xylafoxlin



EST2930



0 47776 02930 9